



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/452,043

11/30/1999

TED F. RABENKO

36158/NEC/B6

9799

23363

7590

05/20/2004

CHRISTIE, PARKER & HALE, LLP  
350 WEST COLORADO BOULEVARD  
SUITE 500  
PASADENA, CA 91105

EXAMINER

YAO, KWANG BIN

ART UNIT

PAPER NUMBER

2667

DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/452,043

Applicant(s)

RABENKO ET AL.

Examiner

Kwang B. Yao

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-35,68-103 and 136 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35,68-103 and 136 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2667

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/3/04 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-35, 68-103, 136 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 6, 8-14, 16-22, 25, 26, 28, 31, 32, 35-72, 74, 76-82, 84-90, 93, 94, 96, 99, 100, 103, 136 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (US 6,169,734) in view of Frankel et al. (US 6,075,784).

Wilson discloses an Internet phone set system comprising the following features: regarding claim 1, as depicted in Fig. 3, a microphone (132) coupled to a network to provide voice data to the network, wherein the network includes voice data and non-voice data (column 4, lines 51-56); a speaker (130) configured to facilitate listening to voice data from the network, a dialing device (116) coupled to the network to facilitate routing of voice data upon the network, first port (Fig. 2, REF 82) configured to facilitate communication with a first network device; second port (Fig. 2, REF 86) configured to facilitate communication with a second network device. See column 3-6.

Regarding claim 2, Wilson discloses the following features: as depicted in Fig. 2, wherein the first port (82) is configured to facilitate communication of voice data packets with the first network device and the second port (86) is configured to facilitate communication of voice data packets with the second network device (90). See column 3-6.

Regarding claim 3, Wilson discloses the following features: wherein the microphone (Fig. 3, REF 132) and the speaker (Fig. 3, REF 130) at least partially define a handset (Fig. 2, REF 55). See column 3-6.

Regarding claim 4, Wilson discloses the following features: wherein the dialing device (Fig. 2, REF 50) comprises a keypad (Fig. 2, REF 65). See column 3-6.

Regarding claim 8, Wilson discloses the following features: in Fig. 3, a voice engine processor (118) in communication with the network switch, the voice engine processor (118) being configured to digitize and compress voice data from the microphone (132) and to decompress and perform digital to analog conversion upon voice data provided to the speaker (130). See column 3-6.

Art Unit: 2667

Regarding claim 9, Wilson discloses the following features: comprising a voice engine processor (118) in communication with the network switch, the voice engine processor being configured to digitize, compress and packetize voice data from the microphone (132) and to depacketize, decompress and perform digital to analog conversion upon voice data provided to the speaker (130). See column 3-6.

Regarding claim 12, Wilson discloses the following features: switch controller having at least one port (Fig. 2, REF 82) for facilitating electrical communication with a network; wherein the network includes voice data and non-voice data (column 4, lines 51-56); and a voice engine processor (Fig. 3, REF 118) in electrical communication with the switch controller, the voice processor having a microphone port (Fig. 3, REF 132) for facilitating electrical communication with a microphone and having a speaker port (Fig. 3, REF 130) or facilitating electrical communication with a speaker.

Regarding claim 14, wherein the switch controller is configured to route voice data packets over a network.

Regarding claim 16, wherein the switch controller is configured to route voice data packets over the Internet.

Regarding claim 20, Wilson discloses the following features: wherein the switch controller is configured to be compatible with Internet Protocol. See column 3-6.

Regarding claim 21, Wilson discloses the following features: wherein electrical communication between the switch controller and the voice engine processor (118) is facilitated via a media independent interface and a microprocessor interface. See column 3-6.

Regarding claim 22, Wilson discloses the following features: wherein the switch controller comprises two ports (80, 82) for facilitating communication with the network. See column 3-6.

Regarding claim 25, wherein the voice engine processor further comprises a keypad port (65) for facilitating communication with a keypad. See column 3-6.

Regarding claim 26, Wilson discloses the following features: wherein the voice engine processor (118) further comprises a display port (150) for facilitating communication with a display (71).

Regarding claim 28, Wilson discloses the following features: wherein the voice engine processor (118) is configured to compress voice communications.

Regarding claim 31, Wilson discloses the following features: wherein the voice engine processor is configured to provide a desired level of quality of service. See column 3-6.

Regarding claim 32, Wilson discloses the following features: wherein the voice engine processor is configured to provide signaling for voice traffic. See column 3-6.

Regarding claim 35, Wilson discloses the following features: a network telephone (Fig. 2, REF 50), a network including voice data packets and non-voice data packets (column 4, lines 51-56). See column 3-6.

Wilson does not disclose the following features: regarding claim 1, a prioritization circuit coupled to the network apply a first processing priority level to voice data provided by the microphone and a second processing priority level to non-voice data in the network; regarding claim 6, wherein the prioritization circuit is defined by a network switch; regarding claim 8, wherein the prioritization circuit is defined by a network switch; regarding claim 9, the

Art Unit: 2667

prioritization circuit is defined by a network switch; regarding claim 10, wherein the prioritization circuit is configured to tag voice data packets to facilitate prioritization thereof; regarding claim 11, wherein the prioritization circuit is configured to tag voice data packets to facilitate prioritization thereof and is configured to read tags on data packets provided thereto by the network to facilitate prioritization thereof; regarding claim 12, wherein the switch controller is configured to assign a first processing priority level to voice data and a second processing priority level to non-voice data; regarding claim 13, wherein the switch controller applies a high processing priority level to voice packet to voice packets; regarding claim 15, wherein the switch controller is configured to apply prioritization to voice data packets and to route voice data packets over an Ethernet; regarding claim 17, wherein the switch controller is configured to apply a first processing priority level to voice data packets provided by the microphone and coupled to route the voice data packets over a network; regarding claim 18, wherein the switch controller is configured to tag voice data packets to facilitate assigning a first processing priority thereof; regarding claim 19, wherein the switch controller is configured to tag voice data packets to facilitate assigning a first processing priority thereof and is configured to read tags on data packets provided thereto by the network to facilitate prioritization thereof; regarding claim 35, a prioritization circuit led o tag voice data packets with information representative of a priority thereof to ensure that the voice data packets are given a higher processing priority than non-voice packets and coupled to read tags associated with packets.

Frankel et al. discloses a system for communicating voice and data comprising the following features: as depicted in Fig. 2, regarding claim 1, a prioritization circuit (110) coupled to the network apply a first processing priority level to voice data provided by the microphone

Art Unit: 2667

and a second processing priority level to non-voice data in the network; regarding claim 6, wherein the prioritization circuit is defined by a network switch; regarding claim 8, wherein the prioritization circuit (110) is defined by a network switch; regarding claim 9, the prioritization circuit is defined by a network switch; regarding claim 10, wherein the prioritization circuit (110) is configured to tag voice data packets to facilitate prioritization thereof; regarding claim 11, wherein the prioritization circuit (110) is configured to tag voice data packets to facilitate prioritization thereof and is configured to read tags on data packets provided thereto by the network to facilitate prioritization thereof; regarding claim 12, wherein the switch controller (110) is configured to assign a first processing priority level to voice data and a second processing priority level to non-voice data; regarding claim 13, wherein the switch controller (110) applies a high processing priority level to voice packet to voice packets; regarding claim 15, wherein the switch controller (110) is configured to apply prioritization to voice data packets and to route voice data packets over an Ethernet; regarding claim 17, wherein the switch controller (110) is configured to apply a first processing priority level to voice data packets provided by the microphone and coupled to route the voice data packets over a network; regarding claim 18, wherein the switch controller (110) is configured to tag voice data packets to facilitate assigning a first processing priority thereof; regarding claim 19, wherein the switch controller (110) is configured to tag voice data packets to facilitate assigning a first processing priority thereof and is configured to read tags on data packets provided thereto by the network to facilitate prioritization thereof; regarding claim 35, a prioritization circuit (110) led o tag voice data packets with information representative of a priority thereof to ensure that the voice data packets are given a higher processing priority than non-voice packets and coupled to read tags



Art Unit: 2667

associated with packets. See column 12, lines 33-48. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Wilson, by using the features, as taught by Frankel et al., in order to provide less delay of the voice packets in the system. See Frankel et al., column 11, line 29 to column 12, line 9.

Claims 36-72, 74, 76-82, 84-90, 93, 94, 96, 97, 99, 100, 103, 136 disclose the similar limitations as claims 1-4, 6, 8-14, 16-22, 25, 26, 28-29, 31, 32, 35; thus Claims 36-72, 74, 76-82, 84-90, 93, 94, 96, 99, 100, 103, 136 are rejected by the same reasons above.

5. Claims 5, 7, 15, 23, 24, 27, 33, 73, 75, 83, 91, 92, 95, 101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (US 6,169,734) in view of Frankel et al. (US 6,075,784) as applied to claims 1, 12, 69, 80 above, and further in view of Shankar et al. (US 6,570,869).

Wilson and Frankel et al. disclose the claimed limitations above. Wilson and Frankel et al. do not disclose the features of: regarding claim 5, the first port and the second port comprise **Ethernet** 10/100 ports; regarding claim 7, wherein the prioritization circuit is defined by an **Ethernet** switch; regarding claim 15, wherein the switch controller is configured to route voice data packets over an **Ethernet**; regarding claim 23, wherein the switch controller comprises two **Ethernet** ports for facilitating communication with the network; regarding claim 24, wherein the switch controller comprises two 10/100 megabit/sec **Ethernet** ports for facilitating communication with the network; regarding claim 27, the switch controller is configured to be placed serially into a **Ethernet** transmission medium intermediate a network interface card and a switch; regarding claim 33; wherein the voice engine processor is configured to provide **signaling for PBX** voice traffic. (Emphasis added).

Shankar et al. discloses a communication system comprising the following features: regarding claim 5, in Fig. 2, the first port and the second port comprise **Ethernet** (218) 10/100 ports; regarding claim 7, wherein the prioritization circuit is defined by an **Ethernet** (218) switch; regarding claim 15, wherein the switch controller is configured to route voice data packets over an **Ethernet** (218); regarding claim 23, wherein the switch controller comprises two **Ethernet** (218) ports for facilitating communication with the network; regarding claim 24, wherein the switch controller comprises two 10/100 megabit/sec **Ethernet** (218) ports for facilitating communication with the network; regarding claim 27, the switch controller is configured to be placed serially into a **Ethernet** (218) transmission medium intermediate a network interface card and a switch; regarding claim 33; wherein the voice engine processor is configured to provide **signaling for PBX** (Fig. 1, REF 100) voice traffic. (Emphasis added). See column 4, lines 40-44; column 7, lines 19-59. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Wilson and Frankel et al., by using the features, as taught by Shankar et al., in order to provide a flexible solution for integrating with legacy systems. See Shankar et al., column 2, lines 53-55.

Claims 73, 75, 83, 91, 92, 95, 101 discloses the same limitations as claims 5, 7, 23, 24, 27, 33; thus Claims 73, 75, 83, 91, 92, 95, 101 are rejected by the same reasons above.

6. Claims 29, 30, 34, 97, 98, 102 rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (US 6,169,734) in view of Frankel et al. (US 6,075,784) as applied to claims 12, 80 above, and further in view of Verthein et al. (US 6,487,196).

Wilson and Frankel et al. disclose the claimed limitations above. Wilson and Frankel et al. do not disclose the features of: regarding claim 29, wherein the voice engine processor is

Art Unit: 2667

configured to compress voice communications using PCM compression; regarding claim 30, wherein the voice engine processor is configured to suppress silence; regarding claim 34, wherein the voice engine processor is configured to provide echo control; regarding claim 97, wherein the voice engine processor is configured to compress voice communications using PCM compression; regarding claim 98, wherein the voice engine processor is configured to suppress silence; regarding claim 102, wherein the voice engine processor is configured to provide echo control. Verthein et al. discloses a communication system comprising the following features: regarding claim 29, wherein the voice engine processor is configured to compress voice communications using PCM compression; regarding claim 30, wherein the voice engine processor is configured to suppress silence; regarding claim 34, wherein the voice engine processor is configured to provide echo control; regarding claim 97, wherein the voice engine processor is configured to compress voice communications using PCM compression; regarding claim 98, wherein the voice engine processor is configured to suppress silence; regarding claim 102, wherein the voice engine processor is configured to provide echo control. See column 10, lines 50-56; column 16, lines 23-25 and 60-64. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Wilson and Frankel et al., by using the features, as taught by Verthein et al., in order to provide a better voice quality. See column 3, lines 1-19.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2667

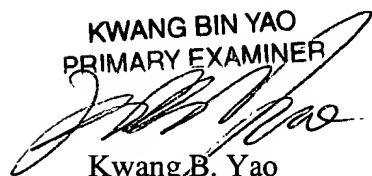
Kim et al. (US 6,678,280) discloses a voice packet transmission control method.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 703-308-7583. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 703-305-4378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KWANG BIN YAO  
PRIMARY EXAMINER



Kwang B. Yao  
May 14, 2004